

N
space. A first heat suppressing member for suppressing heat within the conduction path from being transmitted to the one of the mold bodies is disposed between the conduction member and the one of the mold bodies. Further, a second heat suppressing member is disposed at a position opposite to the first heat suppressing member at the time of mold-clamping the pair of the mold bodies.

IN THE SPECIFICATION:

SB 0012
pls. initial
date 0.4.10.02
Kindly amend paragraph [0025] of the disclosure to read as follows.

--[0012]

12
On the other hand, at the tip end portion of the spool bush 108 provided so as to penetrate the center of the fixed mold mirror surface board 106 of the fixed mold body 101, a die portion 119 constituting a part of the mold forming portion is formed so as to oppose to the punch 115 of a mold releasing mechanism. The portion 119 serves to punch the center hole of the substrate in cooperation with the tip end portion of the punch 115. A space formed among the die portion 119 of the spool bush 118, the tip end portion of the spool bush inside the die portion 119 and the tip end portion of the punch 115 constitutes a runner and a gate serving as a fluid path for conducting the molten molding material injected from the spool 109 into the mold space 105.

Kindly amend paragraph [0025] of the disclosure to read as follows.

--[0025]

13
(Means for Solving the Problems)

R3
In order to solve the aforesaid problem, the invention of a first aspect is arranged in a manner that in a mold for injection molding of a disc substrate including a pair of mold bodies which are disposed in a manner that circular-shaped mold forming surfaces thereof are opposed to each other to form a disc-shaped mold space therebetween, and a conduction means which is fitted to one of the pair of mold bodies so as to communicate with outside through a conduction path for conducting molten molding material injected from outside into the disc-shaped mold space, the mold for injection molding of a disc substrate is characterized in that a first heat suppressing means for suppressing heat within the conduction path from being transmitted to the one of the pair of mold bodies is disposed between the conduction means and the one of the pair of mold bodies fitted to the conduction means.

Kindly amend ~~paragraph~~ [0026] of the disclosure to read as follows.

--[0026]

R4
According to the invention of the first aspect, at the time of molding a disc substrate by using the mold, even when the heat of the molten molding material injected into the conduction path of the conduction means fitted to the one mold body is transmitted within the conduction means, the heat is suppressed from being transmitted to the one mold body by the first heat suppressing means which is disposed between the conduction means and the one mold body. Thus, the one mold body is prevented from being heated to a temperature higher than that of the other mold body, so that there does not arise any asymmetry of residual stresses that becomes a cause of the warp of the injection-molded substrate.

Kindly amend paragraph [0027] of the disclosure to read as follows.

AS
--[0027]

The invention of a second aspect is arranged, in the arrangement of the first aspect, in a manner that a second heat suppressing means is disposed at a position opposing to the first heat suppressing means on other mold body side of the pair of mold bodies.

Kindly amend paragraph [0028] of the disclosure to read as follows.

AB
--[0028]

According to the invention of the second aspect, at the time of molding a disc substrate by using the mold, even when the heat of the molten molding material injected into the conduction path of the conduction means fitted to the one mold body is transmitted within the conduction means, the heat is suppressed from being transmitted to the one mold body by the first heat suppressing means which is disposed between the conduction means and the one mold body. Further, the heat is also suppressed from being transmitted to the other mold body by the second heat suppressing means which is disposed at the position opposing to the first heat suppressing means on the other mold body side. Thus, there does not arise asymmetry of residual stresses that becomes a cause of the warp of the injection-molded substrate.

Kindly amend paragraph [0055] of the disclosure to read as follows.

AT
--[0055]

(Effects of the Invention)

R7
As described above, according to the invention of the first aspect, since the first heat suppressing means suppresses the heat of the molten molding material from being transmitted to the mold body, the degree of asymmetry of the heat distribution between the pair of mold bodies of the mold can be reduced. Thus, the degree of asymmetry of the residual stresses which is a cause of the warp of the injection-molded substrate can be reduced. Further, since the temperature distribution on the mold forming surface can be made uniform, it is possible to reduce double refraction.

Kindly amend ~~paragraph~~ paragraph [0056] of the disclosure to read as follows.

--[0056]

R8
According to the invention of the second aspect, at the time of molding a disc substrate by using the mold, the heat of the injected molten molding material is suppressed from being transmitted to the one mold body by the first heat suppressing means which is disposed between the conduction means and the one mold body, and further, the heat is also suppressed from being transmitted to the other mold body by the second heat suppressing means which is disposed at the position opposing to the first heat suppressing means on the other mold body side. Thus, since the temperature distribution becomes almost uniform between the two mold bodies, there does not arise asymmetry of residual stresses that becomes a cause of the warp of the injection-molded substrate.

As a result, as for the disc substrate, the warp is prevented from being caused just after the molding and further the warp is prevented from being increased with the time lapse after the molding.